

COORDINATED ATMOSPHERIC CHEMISTRY CAMPAIGN OVER EASTERN NORTH AMERICA AND NORTH ATLANTIC IN SUMMER 2004

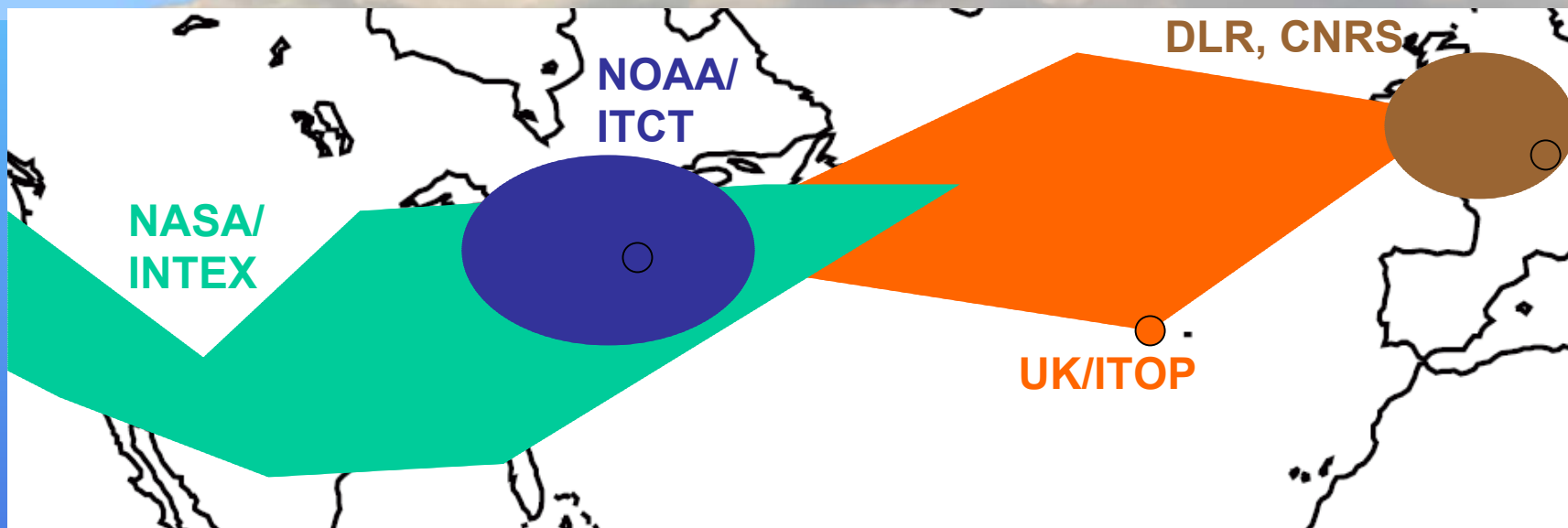
International,
multi-agency
collaboration



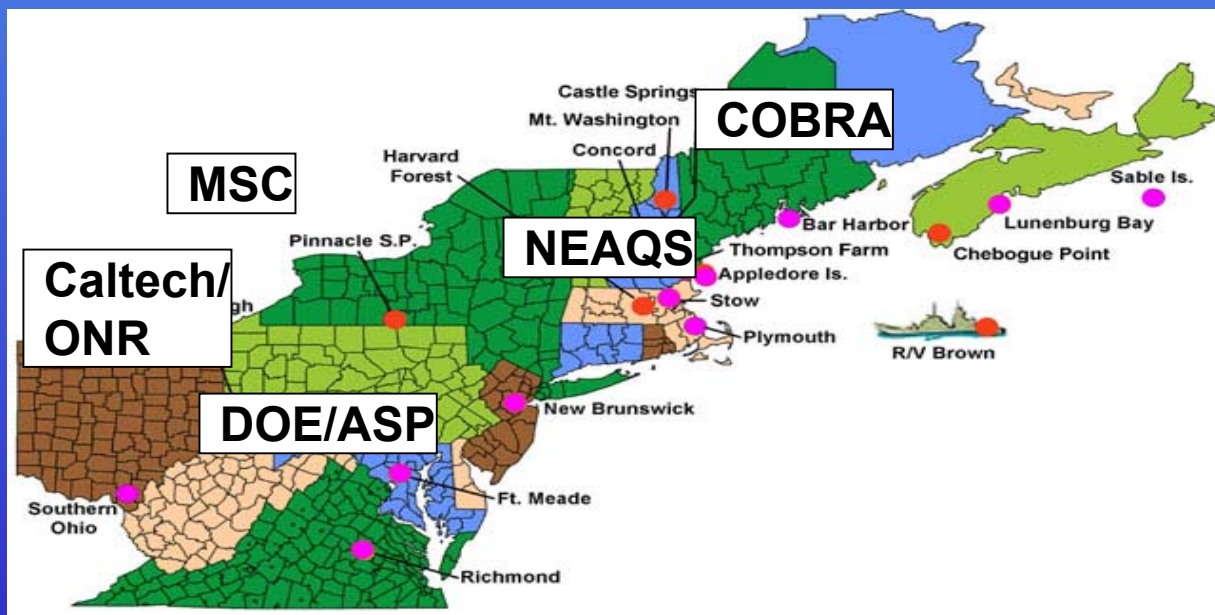
SCIENTIFIC OBJECTIVES

- *Regional Air Quality: characterize sources and transport of pollution in northeastern North America*
- *Continental Outflow: quantify North American outflow of environmentally important gases and aerosols, relate to sources*
- *Transatlantic Pollution: understand transport and chemical evolution of North American pollution across the Atlantic*
- *Aerosol Radiative Forcing: characterize direct/indirect effects of aerosols over northeastern North America and western North Atlantic*

ICARTT: THE PLAYERS

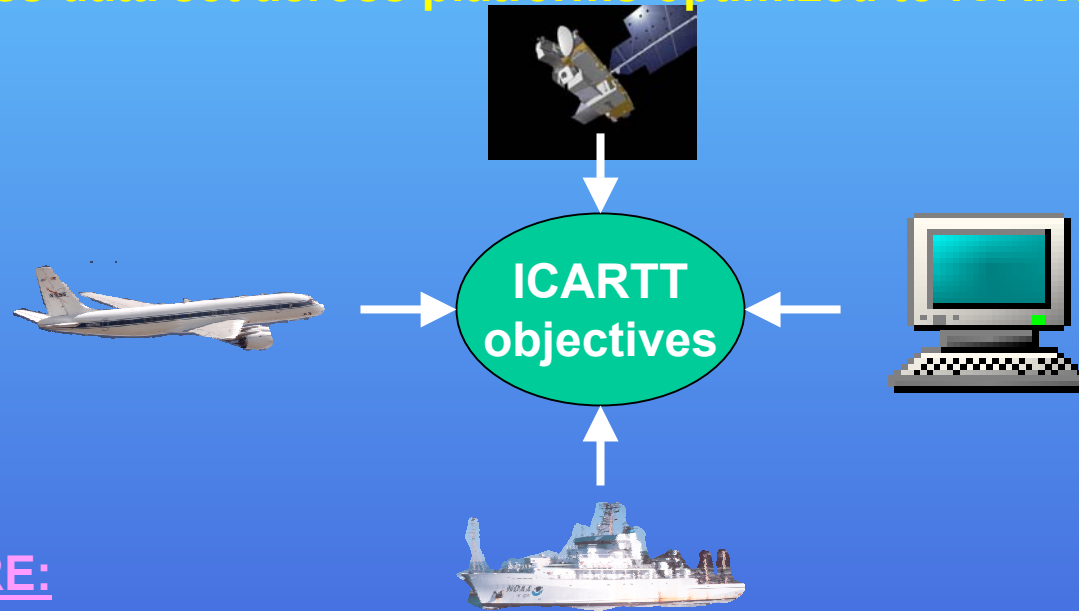


Zoom over
northeastern
North America



ICARTT COORDINATION IN THE FIELD

Obtain a seamless data set across platforms optimized to ICARTT objectives



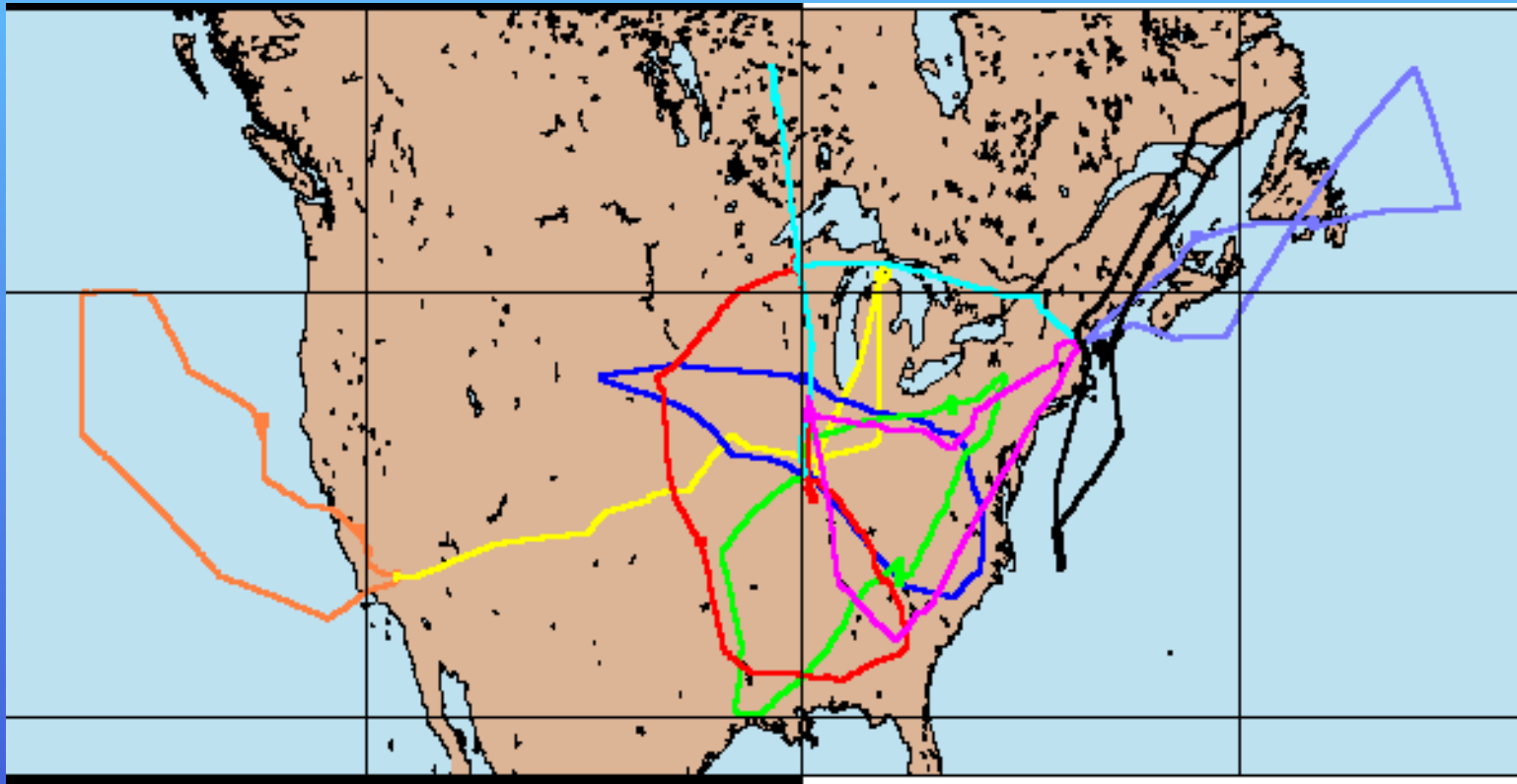
THIS WILL REQUIRE:

- Forecast sharing (web posting)
- Data sharing (quick release, web posting, consistent formats)
- Aircraft intercomparisons
- Surface station overflights
- Satellite validation (AIRS, MOPITT, GOME, SCIAMACHY, MODIS, TES, OMI)

ICARTT Platforms



NASA DC-8 Flights

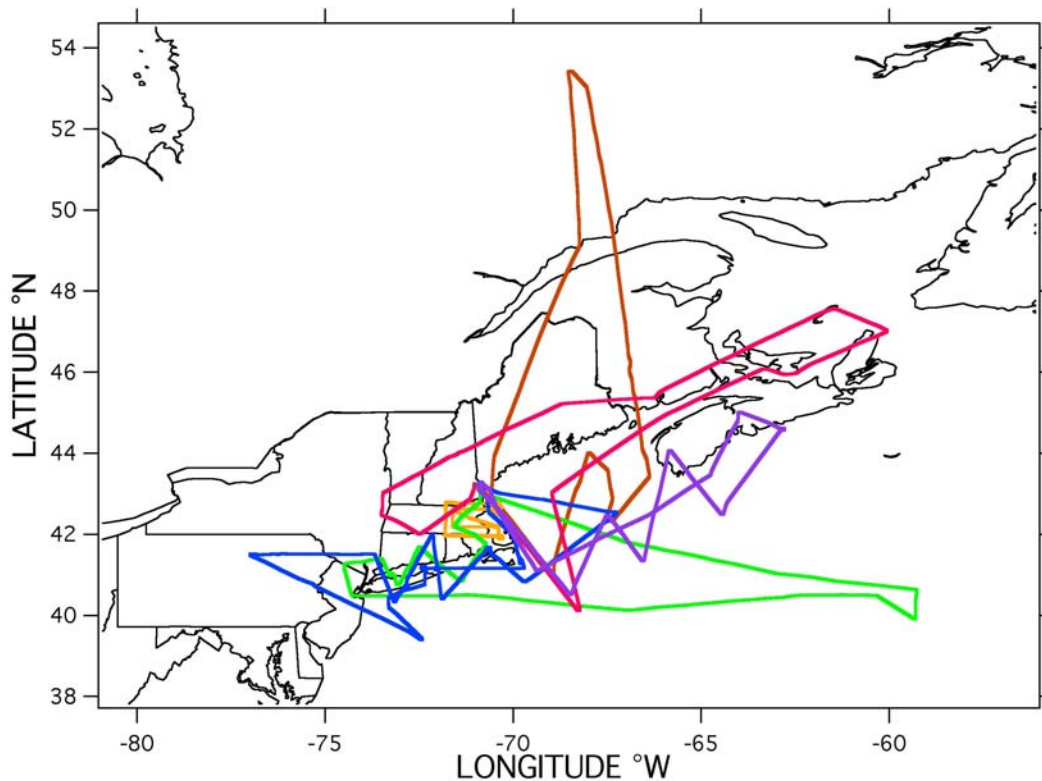


9 Sci flights 1 west coast
 2 transit
 3 Mid-America
 3 Pease

Intercomparison: P3 done, BAE upcoming

NOAA WP-3D Flights

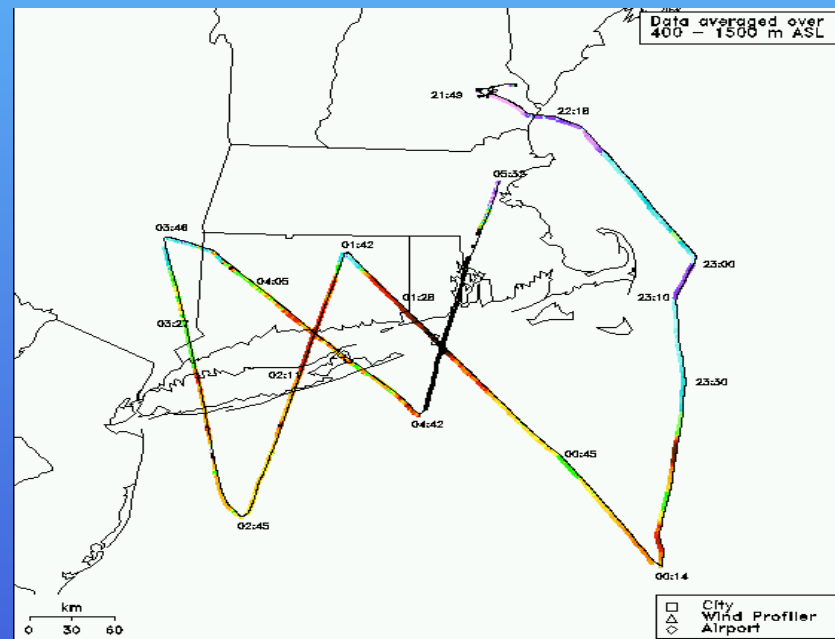
WP-3D Flights 7/9,11,15,20,21,22



7 Science Flights
1 night flight
DC8 intercomparison

NOAA DC-3 and NASA J-31 Flights

DC-3 Remote Sensing Lidar 9 flights



J-31 Aerosol Radiation Remote Sensing
8 flights in the Gulf of Maine
w/6 Ronald H. Brown rendezvous

DOE G1 & CIRPAS Twin Otter



First Science Flight Today!



Deploy to Cleveland August 2

MSC Canada



July 20 Deploy to Cleveland

July 21 Science Flight

July 21 Deploy to Bangor

July 22 Maritime Science Flight

July 23 return to Cleveland

UK ITOP BAE 146



5 Science Flights from Azores
July 17 (Lagrangian with P-3),
July 19 (Lagrangian with P-3 and DC-8),
July 20 (Lagrangian with DC8), 22 July

DLR Falcon CNRS Falcon



DLR Falcon:

Test Flights from Oberpfaffenhofen,
19 July Transfer to Paris

22 July (Lagrangian with P-3 and DC-8)

23 July (Alaskan/Canadian smoke)



CNRS Falcon

Was not delivered in time for ICARTT

NSF King Air and NASA Proteus



**King Air NSF COBRA
DC-8 intercomparison over
WI Tower Site**



**Proteus NPOESS Payload
AQUA Validation
Deployed from LaRC, VA**

